

CLAIMS

What is claimed is:

- 5 1. A method for configurably loading a data object comprising a plurality of hierarchically related entities and information specifying the hierarchical relationship of the entities, comprising the steps of:

for each level of the hierarchy, defining a target location for storing entities of that level
10 and a target location for storing inheritance information for entities of that level;

Receiving as input the hierarchically related entities and the information specifying their hierarchical relationship;

15 For each entity, determining its hierarchical level from the information, and generating inheritance information for that entity; and

20 Storing the entity and its inheritance information in their respective target locations.

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2. The method of claim 1, wherein ones of the entities have attributes, each attribute having a value and a first name, further comprising the steps of:

For hierarchical level, defining a target location for storing attributes associated with each entity of that level, and defining a second name in the target location for each first attribute name;

Receiving as input the hierarchically related entities and their associated attributes;

For each entity having an attribute, mapping the first name of the attribute to the second name of the attribute; and

Storing the attribute in its target location under its second name.

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§. The method of claim 1, wherein the target locations for entities of each hierarchical level further comprise one of an index class, an auxiliary index class, a table, and a part.

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§. The method of claim 1, wherein the target location for inheritance information further comprises one of an index class, an auxiliary index class, a table and a part.

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§. The method of claim 2, wherein the target location for an attribute further comprises one of an index class, an auxiliary index class, a table and a part.

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§. The method of claim 1, further comprising the step of assigning an identifier to each entity.

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§. The method of claim 6, further comprising the step of storing the inheritance information of each entity with the identifier of that entity in its target location.

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§. The method of claim 1, wherein the inheritance information of an entity is stored in the same target location as the entity itself.

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¶. The method of claim 2, further comprising the step of assigning an identifier to each entity.
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1b. The method of claim ~~9~~, further comprising the step of storing each attribute of an entity with the identifier of that entity in the attribute target location.
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1h. The method of claim 2, wherein the attribute information of an entity is stored in the same target location as the entity itself.

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12. The method of claim 1, wherein the inheritance information further comprises one or more of a parent entity identifier, a child entity identifier, a sibling identifier, and an auxiliary index class row identifier.

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13. The method of claim 1, wherein the ~~data~~ entity further comprises an outline defining the order and structure of its entities.

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14. The method of claim 1, wherein the relationship information further comprises container labels.
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15. The method of claim 13, wherein the relationship information further comprises the degree of indentation of an entity in the outline, all entities of a same hierarchical level having a same degree of indentation.

16. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for configurably loading a data object comprising a plurality of hierarchically related entities and information specifying the hierarchical relationship of the entities, comprising the steps of:

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for each level of the hierarchy, defining a target location for storing entities of that level and a target location for storing inheritance information for entities of that level;

10 Receiving as input the hierarchically related entities and the information specifying their hierarchical relationship;

For each entity, determining its hierarchical level from the information, and generating inheritance information for that entity; and

15 Storing the entity and its inheritance information in their respective target locations.

20 17. The method of claim 16, wherein ones of the entities have attributes, each attribute having a value and a first name, further comprising the steps of:

25 For hierarchical level, defining a target location for storing attributes associated with each entity of that level, and defining a second name in the target location for each first attribute name;

Receiving as input the hierarchically related entities and their associated attributes;

30 For each entity having an attribute, mapping the first name of the attribute to the second name of the attribute; and

Storing the attribute in its target location under its second name.

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18. The method of claim 16, wherein the target locations for entities of each hierarchical level further comprise one of an index class, an auxiliary index class, a table, and a part.
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19. The method of claim 16, wherein the target location for inheritance information further comprises one of an index class, an auxiliary index class, a table and a part.
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20. The method of claim 17, wherein the target location for an attribute further comprises one of an index class, an auxiliary index class, a table and a part.
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- 10 21. The method of claim 16, further comprising the step of assigning an identifier to each entity.
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22. The method of claim 16, further comprising the step of storing the inheritance information of each entity with the identifier of that entity in its target location.
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23. The method of claim 16, wherein the inheritance information of an entity is stored in the same target location as the entity itself.
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24. The method of claim 17, further comprising the step of assigning an identifier to each entity.
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25. The method of claim 24, further comprising the step of storing each attribute of an entity with the identifier of that entity in the attribute target location.
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26. The method of claim 17, wherein the attribute information of an entity is stored in the same target location as the entity itself.

27. The method of claim 16, wherein the inheritance information further comprises one or more of a parent entity identifier, a child entity identifier, a sibling identifier, and an auxiliary index class row identifier.

13 5 28. The method of claim 16, wherein the ~~data~~ entity further comprises an outline defining the order and structure of its entities.

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14 29. The method of claim 16, wherein the relationship information further comprises container labels.

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15 30. The method of claim 14, wherein the relationship information further comprises the degree of indentation of an entity in the outline, all entities of a same hierarchical level having a same degree of indentation.

16 31. A system for configurably loading a data object comprising a plurality of hierarchically related entities and information specifying the hierarchical relationship of the entities, comprising:

17 20 Means for defining, for entities at each level of the hierarchy, a target location in a data repository for storing entities of that level and a target location for storing inheritance information for entities of that level;

18 25 input means for receiving the hierarchically related entities and the information specifying their hierarchical relationship;

26 Means for determining the hierarchical level of each entity received from the information, and generating inheritance information for that entity; and

27 30 Means for storing the entity and its inheritance information in their respective target locations.

32. The system of claim 31, wherein ones of the entities have attributes, each attribute having a value and a first name, further comprising:

5 Means for defining, for each hierarchical level, a target location for storing attributes associated with each entity of that level, and means for defining a second name in the target location for each first attribute name;

Input means for receiving the hierarchically related entities and their associated attributes;

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Means for mapping the first name of each attribute received for an entity to the second name of the attribute; and

Means for storing the attribute in its target location under its second name.

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33. The system of claim 31, wherein the target locations for entities of each hierarchical level further comprise one of an index class, an auxiliary index class, a table, and a part.

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34. The system of claim 31, wherein the target location for inheritance information further comprises one of an index class, an auxiliary index class, a table and a part.

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35. The system of claim 32, wherein the target location for an attribute further comprises one of an index class, an auxiliary index class, a table and a part.

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25 36. The system of claim 31, further comprising means for assigning an identifier to each entity.

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37. The system of claim 36, further comprising means for storing the inheritance information of each entity with the identifier of that entity in its target location.

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38. The system of claim 31, wherein the inheritance information of an entity is stored in the same target location as the entity itself.

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5 39. The system of claim 32, further comprising means for assigning an identifier to each entity.

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40. The system of claim 39, further comprising means for storing each attribute of an entity with the identifier of that entity in the attribute target location.

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41. The system of claim 32, wherein the attribute information of an entity is stored in the same target location as the entity itself.

15 42. The system of claim 31, wherein the inheritance information further comprises one or more of a parent entity identifier, a child entity identifier, a sibling identifier, and an auxiliary index class row identifier.

20 43. The system of claim 31, wherein the ~~data~~ entity further comprises an outline defining the order and structure of its entities.

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44. The system of claim 31, wherein the relationship information further comprises container labels.

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25 45. The system of claim 43, wherein the relationship information further comprises the degree of indentation of an entity in the outline, all entities of a same hierarchical level having a same degree of indentation.